Production of galanthamine compounds used for treating e.g. neurological disorders involves oxidizing alpha beta ethylenic ketone compound into spirodienone compound

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Abstract of **FR2826005**

Production of galanthamine compounds (1) involves oxidizing an alpha , beta -ethylenic ketone compound (10) into a spirodienone compound (11). Production of galanthamine compounds of formula (1) involves oxidizing an alpha , beta -ethylenic ketone compound of formula (10) into a spirodienone compound of formula (11). R1 = H, and R2 = OH, or R1 + R2 = =O; R3-R5 = H, OH or 1-12C alkoxy; R6 = H, 1-12C alkyl, (CH2)nNR7R8 or (CH2)nN<+>R7R8R9; R7-R9 = H, CN, 1-4C alkyl, aryl 1-4C alkyl, arylalkenyl, 1-4C alkylcarbonyl or arylcarbonyl (all optionally alkyl, alkenyl and aryl substituted by at least one halo, OH, alkoxy, alkylthio, acyl, carboxy optionally salified or esterified, CN, NO2, SH, mono- or di-alkylamino), or NR7R8 = heterocyclyl; Z = two H atoms or one O atom, and X = O, S, N, SO, SO2, NR6 or a protected amine. Independent claims are also included for compounds of formulae (8), (9), (11) and (12).